

## 2.1 Order of Operations

(Textbook Pages: Pages 88–89)

Name \_\_\_\_\_

A) Complete the following using the order of operations. Do only **ONE STEP** at a time.

For each step, list the specific problem you are doing for that step and its answer in the first column, and then substitute that answer into the problem and state the result in the second column.

The first one is completed as an example.

$$1) \quad 5 - 7 + 3^3 \div 9 \cdot (7 - 9)$$

a) Problem/Answer:  $7 - 9 = -2$

Result:  $5 - 7 + 3^3 \div 9 \cdot (-2)$

b) Problem/Answer:  $3^3 = 27$

Result:  $5 - 7 + 27 \div 9 \cdot (-2)$

c) Problem/Answer:  $27 \div 9 = 3$

Result:  $5 - 7 + 3 \cdot (-2)$

d) Problem/Answer:  $3 \cdot (-2) = -6$

Result:  $5 - 7 + (-6)$

e) Problem/Answer:  $5 - 7 = -2$

Result:  $(-2) + (-6)$

f) Problem/Answer:  $(-2) + (-6) = -8$

Result:  $-8$

$$2) \quad 8 + (-3^2 + 3) \div 2 \cdot 4 - 6$$

$$3) \quad [24 \div (1 - 3)^2 + 3 \cdot (-2)]^4$$

Problem/Answer

Result

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

d) \_\_\_\_\_

e) \_\_\_\_\_

f) \_\_\_\_\_

Problem/Answer

Result

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

d) \_\_\_\_\_

e) \_\_\_\_\_

f) \_\_\_\_\_

$$4) \quad [2 + (3 - 5)6] \div (5 \cdot 8 - 10)$$

Problem/Answer

Result

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

Problem/Answer

Result

d) \_\_\_\_\_

e) \_\_\_\_\_

f) \_\_\_\_\_